AD-A166 654   AUTOMATED MOBILITY PACKING/LOAD LISTS (DATA AND FORMAT   1/1
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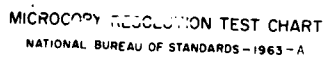   GUNTER AFS AL B NEWELL ET AL. MAR 86
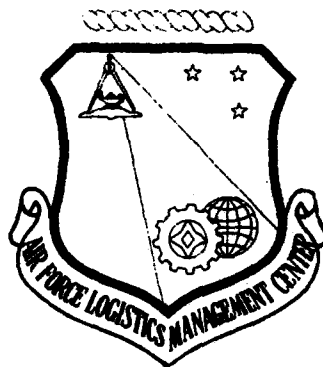
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AIR FORCE LOGISTICS MANAGEMENT CENTER

AUTOMATED MOBILITY PACKING/LOAD LISTS
(DATA AND FORMAT EVALUATION)

PROJECT NUMBERS: LX841131 and LX841132

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MARCH 1986

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ABSTRACT

This report identifies the changes to the mobility packing list and load list formats which are to be incorporated into the redesigned on-line COMPES. The redesign is currently under development.

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EXECUTIVE SUMMARY

The Automated Mobility Packing List and Automated Mobility Load List (Data and Format Evaluation) projects were conducted simultaneously. This final report consolidates the findings.

The objective of these projects was to determine data elements and output formats for future automated mobility packing lists and mobility load lists.

ANG, AFRES, MAJCOMs, and bases were polled via message, bases were visited, and packing/load list users were interviewed to obtain recommendations for changes.

The proposed data elements and output formats were submitted to the COMPES LOGMOD-B Functional System Development Team (FSDT) for evaluation. The FSDT evaluated the recommendations and determined which changes would be included in the redesigned (on-line) COMPES.

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CHAPTER 1

THE PROBLEM

BACKGROUND

The existing mobility packing list and mobility load list were designed during the initial COMPES development during 1981. Both of these products have had few changes since their initial development. The AFLMC Directorate of Logistics Plans (LGX) initiated these projects to determine whether these products were still functional for the end users or required update. The COMPES LOGMOD-B redesign, now in progress, provided an ideal opportunity to change the automated packing/load lists, if required.

PROBLEM STATEMENT

The existing automated mobility packing list and mobility load list may not adequately fill the needs of the end user. If streamlined and improved products were available, unit level mobility personnel could more quickly identify assets required for mobility operations.

CHAPTER 2

DEVELOPMENT

APPROACH

A message was sent to all MAJCOM LGX offices (or equivalent), including ANG and AFRES, requesting comments and recommendations on changes to the mobility packing list and mobility load list as identified in AFR 28-345 (COMPES LOGMOD-B Users Manual). The message requested unit LGXs survey base level COMPES users (Maintenance, Supply, Transportation, and others), and forward replies to the AFLMC.

Draft packing lists and load lists were developed based upon recommendations received. Selected bases were visited and interviews were conducted with unit personnel who prepared/received cargo for mobility deployments. Based on interview results, the packing/load lists were revised.

The revised draft packing/load lists were sent to the ANG, AFRES, and all MAJCOMs for review and comments.

Finally, the revised draft packing/load lists were submitted to the COMPES LOGMOD-B Functional System Development Team (FSDT) for evaluation.

RESULTS

The end users of the automated mobility packing/load lists provided many valuable recommendations and comments for making these products more useful. However, most MAJCOMs requested the final decision be made by the FSDT.

The recommendations and proposed formats were submitted to the FSDT who accepted many of the changes. These changes will be incorporated in the new on-line version of COMPES. For a detailed description and a sample of the revised mobility packing/load lists see Appendices A and B.

One proposed change not accepted by the FSDT, but desired by the majority of the users interviewed, entailed explaining in clear text the codes representing special handling instruction, special loading instructions, and hazard information. The FSDT rejected this idea because; "each time a change to one of these codes would occur, a change to the COMPES mobility packing list and mobility load list programs would need to be made." However, the hazard codes used on these COMPES products identify only the Load and Storage Groups established in AFR 71-4. Even though AFR 71-4, Preparation of Hazardous Materials for Military Air Shipment, frequently changes, the description for each Load and Storage Group remains constant. Therefore changes to the COMPES programs should not be required. By explaining the codes in clear text, any person viewing the packing list or load list would immediately recognize that a particular type of hazard is associated with an item.

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Another proposed change desired by the majority of the users interviewed was the creation of a two-column data field for local unit use. The FSDT rejected this recommendation on the basis of the potential extra workload created for the logistics plans COMPES monitor. The COMPES monitor could spend countless hours updating this one data field for all COMPES users on a base depending upon how frequently units changes data in this field. We concur with the FSDT decision.

An additional issue identified during unit interviews was that Mobility and peacetime cargo shipping procedures are not compatible. Under mobility procedures, mobility packing lists and load lists are the required shipping documents. Special airlift is designated to support the mobility operation. If the aircraft is diverted to some other location due to maintenance problems or higher priority, all or part of the cargo may be unloaded. The responsibility to ship this cargo to its original intended destination must now be assumed by the transportation function at the diverted location. A special airlift mission to ship the off-loaded cargo may not be available since these are normally coordinated several months in advance. The local transportation function must then rely on normal channel (day-to-day) transportation. To ship cargo using channel traffic requires an entirely different set of shipping documents (DD Forms 1149). These shipping documents require many items of information not found on the mobility packing list and load list. The required information may be obtained only from the base where the cargo shipment originated. The process of obtaining the information may be lengthy since various phone numbers must be obtained and the necessary information relayed by telephone. The transportation unit must accommodate its own base's cargo shipments as well. Eventually, after the necessary information has been obtained, the cargo is shipped.

CHAPTER 3

CONCLUSIONS/RECOMMENDATIONS

CONCLUSION

These projects supported and reinforced the efforts of the Functional System Development Team to streamline and enhance the automated mobility packing list and mobility load list. The resultant products will provide unit level mobility personnel better visibility of assets to be deployed for mobility operations.

RECOMMENDATIONS

Even though the COMPES LOGMOD-B FSDT has already evaluated the proposed changes to the automated mobility packing/load lists and has decided on the final products, the following recommendation is presented for future consideration:

Recommend including clear text explanations of hazard codes on the automated mobility packing lists and mobility load lists. (OPR: DSDO/XOX)

The research and interviews conducted during these projects also identified the following recommendation:

Recommend a study be performed to determine the feasibility of modifying or combining mobility and peacetime cargo shipping procedures. (OPR: AFLMC/CC)

ABBREVIATIONS

AFRES - Air Force Reserve
ANG - Air National Guard
CC - Container Identification Code
CCC - Cargo Category Code
CI - Critical Item
COMPES - Contingency Operation/Mobility Planning and Execution System
CUBE - Cubic Feet
DEP ECH - Deployment Echelon
DSDO - Data Systems Design Office
FAC - Functional Account Code
FRN - Force Requirement Number
FSDT - Functional System Development Team
HEL TYPE - Helicopter Type
HGT - Height
HITCH LOC - Hitch Location
HZ - Hazard Code
INC NBR - Increment Number
ITEM NBR - Item Number
ITM PRI - Item Priority
LTH - Length
LOCAL PRI INC - Local Priority Increment
LOGMOD-B - Logistics Module - Base Level
MDS - Mission Design Series
PAA - Primary Aircraft Authorization
PAS - Personnel Accounting Symbol
PCN - Product Control Number
PLAN ID - Plan Identification Number
PLT PROF - Pallet Profile
PRI INC - Priority Increment
PRIME NSN - Primary National Stock Number
QTY - Quantity
SHI - Special Handling Indicator
SLI - Special Loading Indicator
SUB NSN - Substitute National Stock Number
SUF ITM - Suffixed Item
SUF ITM NBR - Suffixed Item Number
TASK UNIT QTY - Tasked Unit Quantity
TK - Tailoring Key
TLR TYPE - Trailer Type
ULN - Unit Line Number
UIC - Unit Identification Code
UTC - Unit Type Code
WT - Weight
WTH - Width

APPENDIX A

Summary of Changes to the Mobility Load List

Line numbers used below refer to the numbers on the left column of the Revised Load List, Appendix A, Figure 2. Line numbers were added to the Current Load List, Appendix A, Figure 1, for comparison purposes.

Line 1 Not changed.

Line 2 The Wing Code was removed.

Line 3 New identifying information added was PLAN ID, ULN (instead of FRN), and MDS. ANNEX, DEPLOYMENT PHASE, and GROUP ID were deleted.

Line 4 Added to accommodate new column headings.

Lines 5-6 PAS, SLOT NBR, and TK were removed from column headings. LOCAL PRI INC was renamed INC NBR. ITM PRI was renamed ITEM NBR. PRIME NSN and SUB NSN were changed to only NSN. QTY was renamed TASK UNIT QTY and was redefined to mean the tasked quantity of a particular NSN. HZ was renamed HAZARD CODE and moved toward the right to provide emphasis. Additionally, HAZARD CODE was expanded to allow up to four codes to be identified with the highest hazard identified first. CCC was moved left one column between NOMENCLATURE and TASK UNIT QTY. WEIGHT was renamed WT. LENGTH was renamed LTH. WIDTH was renamed WTH. HEIGHT was renamed HGT. CI, SLI, and SHI exchanged column positions. REMARKS was added.

Line 7 PRIME UIC/FAC was added to the identifying information. To the right of this item is the three-digit UIC (D40), then the UIC title (EMS), then the six-digit FAC (2E3000), then the FAC title (MUNITIONS MAINT).

Lines 8-11 Display the loaded pallet. This has been rearranged from Line 20 on the Current Load List. A sample remark is also shown.

Lines 12-18 Represents the items loaded on the pallet identified in Line 8. These lines are merely reordered from Lines 7-17 on the Current Load List.

Line 17 Identifies the UIC/FAC of an additional shop providing equipment on the same pallet. The Current Load List only identifies additional shops by their four-character PAS codes.

Lines 19-20 Omitted.

Line 21 The total line was deleted, but the necessary summary data was moved to Line 8.

Lines 22-28 When a mobility load list is prepared for a piece of AGE or a vehicle, an additional LOAD PLANNING INCREMENT SUMMARY will be generated near the bottom of the page just above the optional customs statement. The following fields will be printed: ITEM TYPE with a one-character code, TLR TYPE with a one-character code, TONGUE LTH, HITCHED with a one-character code, HITCH WT, HITCH LOC, NBR BOGIES, TREAD START, TREAD LTH, SHORING with up to three characters, VENTING with a one-character code, SKIDDED ITEMS with a one-character code, HEL TYPE with a one-character code, PLT PROF with a two-character code, AXLE WEIGHT (1-6 axles), AXLE LOCATION (axles 1-6), and AXLE SPAN (axles 1-6).

Lines 29-31 Optional customs statement was broken on three lines instead of two. The extra line was added to allow for future lengthier optional statements.

Line 32 The footer line was simplified, eliminating multiple page numbers.

NOTE: Any deletions from the mobility load list are deletions from the print out only. These data elements ARE NOT removed from the database. If this data is later needed on the print outs they can once again be added.

Current Load List

| 1 | PREPARED 08 JAN 86 13:32 | | | | | | MOBILITY LOAD LIST | | | AS OF 08 JAN 86 | | | PCN SA200-302J |

1	PREPARED 08 JAN 86 13:32	MOBILITY LOAD LIST	AS OF 08 JAN 86	PCN SA200-302J
2		0437MALSQ	J	
3	ANNEX: K	DEPLOYMENT PHASE: UNSPECIFIED	UTC: 3R4BC FRN: B2AA PAA: 18DEP	GROUP ID: F4E MAINT

5	DEP	LOCAL	ITM C	SLOT	PRIME NSN												C	
6	ECH	PRI INC PAS	PRI C	NBR	SUB NSN	NOMENCLATURE	QTY	COC	HZ	WEIGHT	LENGTH	WIDTH	HEIGHT	CUBE	TK	SHI	I SLI
7		MUNITIONS MAINT		2E3000													
8	E1	0001 FCWP	01		1670008204896	PALLET 463L	1	J2D		375	88	108	3	17	A		
14			02 C		7125008721285	BIN CARGO	1	J3D		510	67	33	67	86	A		
15			03 C		7125008721285	BIN CARGO	1	J3D		690	67	33	67	86	A		
16			04		2270003103002	CYL ACETYLENE	1	J3C	18	200	8	8	49	1			
17		FDCD	01		123456789B883	TANK STOR LOX MA-1	1	D2C	28	1250	101	68	75	299			
19		MUNITIONS MAINT		2E3000													
20		FCWP 00	L		1670008204896	PALLET 463L	1	D2C			88	108	69	517			

| 21 | ** TOTAL | DEP ECH E1 | LOCAL PRI INC 0001 | NUMBER OF PIECES: 5 | WEIGHT: 1775 | CUBE: 517 |

| 29 | | MILITARY EQUIPMENT BEING RETURNED TO THE UNITED |
| 30 | | STATES FOR FUTURE USE BY UNITED STATES ARMED FORCES |

Figure 1

| 32 | PCN SA200-302J | VERSION DATE 052985 | PAGE 7 | PAS FCWP | PAGE 7 | FAC 2E3000 | PAGE 4 |

Revised Load List

1	DATE PREPARED 08 JAN 86	MOBILITY LOAD LIST	AS OF 08 JAN 86	PCN ?????-????
2		437MALSQ		
3	PLAN ID 1234X UTC 3R4BC ULN ACYB2AA PAA 018 MDS F-4E			

4						TASK			S S				
5	DEP INC	ITEM C				UNIT			C L H				
6	ECH NBR	NBR C	NSN	NOMENCLATURE	COC	QTY	WT	LTH WTH HGT CUBE	I I I	HAZARD CODE	REMARKS		
7	PRIME UIC/FAC	D40	EMS	2E3000	MUNITIONS MAINT								
8	E1 0001	L	1670008204896	LOADED PALLET	D2C	1	1775	88 108 69 517			THIS PALLET CONTAINS A		
9											VARIETY OF NON MUNITION		
10											ITEMS BELONGING TO MUNITION		
11											MAINTENANCE		
12				2E3000	MUNITIONS MAINT								
13		01	1670008204896	463L PALLET	J2D	1	375	88 108 3 17	A				
14		02 C	7125008721285	BIN CARGO	J3D	1	510	67 33 67 86	A				
15		03 C	7125008721285	BIN CARGO	J3D	1	690	67 33 67 86	A				
16		04	2270003103002	CYL ACETYLENE	J3C	1	200	8 8 49 1	18				
17		D42	AGS	2E1000	POWERED AGE SHOP								
18		01	123456789B883	TANK STOR LOX MA-1	D2C	1	1250	101 68 75 299	D H 28				
19	(omitted)												
20	(omitted)												
21	(omitted)												
22				LOAD PLANNING INCREMENT SUMMARY									

23	ITEM	TLR	TONGUE		HITCH	HITCH	NBR	TREAD	TREAD			SKIDDED	HEL	PLT
24	TYPE	TYPE	LTH	HITCHED	WT	LOC	BOGIES	START	LTH	SHORING	VENTING	ITEMS	TYPE	PROF
25	T	1	10							P	V			

26	..............AXLE WEIGHT...............	.......AXLE LOCATION........	......AXLE SPAN........
27	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6
28	625 625	30 84	88 88

29		MILITARY EQUIPMENT BEING RETURNED
30		TO THE UNITED STATES FOR FUTURE
31		USE BY UNITED STATES ARMED FORCES

Figure 2

| 32 | PCN ?????-???? | VERSION DATE 010586 | PAGE 7 |

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APPENDIX B

Summary of Changes to the Mobility Packing List

Line numbers used below refer to the numbers on the left column of the Revised Packing List, Appendix B, Figure 4. Line numbers were added to the Current Packing List, Appendix B, Figure 3, for comparison purposes. The changes for the packing list are the same as those for the load list with the exception of the three asterisked items below.

Line 1 Not changed.

Line 2 The Wing Code was removed.

Line 3 New identifying information added was PLAN ID, and ULN (instead of FRN), and MDS. ANNEX, DEPLOYMENT PHASE, and GROUP ID were deleted.

* Line 4 PRIME UIC/FAC line was added to the identifying information. To the right of this item is the three-digit UIC (D40), then the UIC title (EMS), then the six-digit FAC (2E3000), then the FAC title (MUNITIONS MAINT).

Line 5 Added to accommodate new column headings.

* Lines 6-7 PAS, SLOT NBR, and TK were removed from column headings. LOCAL PRI INC was renamed INC NBR. ITM PRI was renamed ITEM NBR. SUF ITM was renamed SUF ITM NBR. PRIME NSN and SUB NSN were changed to only NSN. QTY was renamed TASK UNIT QTY and was redefined to mean the tasked quantity of a particular NSN. HZ was renamed HAZARD CODE and moved toward the right to provide emphasis. Additionally, HAZARD CODE was expanded to allow up to four codes to be identified with the highest hazard identified first. CCC was moved left one column between NOMENCLATURE and TASK UNIT QTY. WEIGHT was renamed WT. LENGTH was renamed LTH. WIDTH was renamed WTH. HEIGHT was renamed HGT. CI and SHI exchanged column positions.

Line 8 Identifies the Prime UIC/FAC of shop. The Current Packing List does not identify the shop FAC or FAC Title.

Lines 9-13 Not changed.

Line 14 Identifies the UIC/FAC of an additional shop providing equipment in the same container. The Current Packing List only identifies additional shops by their four-character PAS codes.

Lines 15-17 Identify equipment for new shop.

* Line 18 The TOTAL line was removed entirely since the information was a duplication of previous information.

Lines 19-21 Optional customs statement was broken on three lines instead of two. The extra line was added to allow for future lengthier optional statements.

Line 22 The footer line was simplified, eliminating multiple page numbers.

NOTE: Any deletions from the mobility load list are deletions from the print out only. These data elements ARE NOT removed from the database. If this data is later needed on the print outs they can once again be added.

Current Packing List


```
1  PREPARED 08 JAN 86  13:32                    MOBILITY PACKING LIST      AS OF 08 JAN 86       PCN SA200-304J

2                                               0437MALSQ              J

3        ANNEX: LB              DEPLOYMENT PHASE: UNSPECIFIED      UTC: 3R4BC      FRN: B2AA      PAA: 18DEP    GROUP ID: F4E MAINT
                                                                                                                            C
6  DEP  LOCAL     ITM C SUF SLOT    PRIME NSN
7  ECH PRI INC PAS PRI C ITM NBR    SUB NSN       NOMENCLATURE      QTY CCC HZ WEIGHT LENGTH WIDTH HEIGHT  CUBE TK  SHI I

8            MUNITIONS MAINT    2E3000

9  E1  0002  FCWP  02  C        7125008721285    BIN CARGO            1  J30    510    67    33    67     86      A
10                  S 001    4930002639886    CABLE BATTERY       25
11                  S 002    3256700008973    SHIELD FACE          50
12                  S 003    4110006103026    GLOVES WORK         200
13                  S 004    7310003641213    APRON RUBBER         50
14           FDCD  02  S 005    7125008721285    CLAMP              200
16                  S 006    7300038434113    HOLDER FUSE         450
17                  S 007    2270003103002    SPOOL WIRE           15

18 ** TOTAL  DEP ECH E1    LOCAL PRI INC 0002    ITM-PRI 02                    WEIGHT:    510  CUBE:    86

19                                      MILITARY EQUIPMENT BEING RETURNED TO THE UNITED
20                                      STATES FOR FUTURE USE BY UNITED STATES ARMED FORCES
```

Figure 3

Revised Packing List

```
1  DATE PREPARED 08 JAN 86                       MOBILITY PACKING LIST        AS OF 08 JAN 86      PCN ?????-????

2                                                437MALSQ              .

3  PLAN ID 1234X      UTC 3R4BC    ULN ACYB2AA    PAA 018    MDS F-4E

4  E1 0002 PRIME UIC/FAC    D40 EMS              2E3000 MUNITIONS MAINT

5            SUF                              TASK                S
6  DEP INC ITEM ITM C                         UNIT              C H
7  ECH NBR NBR NBR C NSN        NOMENCLATURE  CCC QTY WT  LTH WTH HGT CUBE I I HAZARD CODE

8                              D40   EMS          2E3000    MUNITIONS MAINT

9  E1 0002 02     C 7125008721285  BIN CARGO    J3D  1   510  67  33 67   86  A
10           001 S 4930002639886  CABLE BATTERY D2C 25
11           002 S 3256700008973  SHIELD FACE   C2Y 50
12           003 S 4110006103026  GLOVES WORK   D4F 200
13           004 S 7310003641213  APRON RUBBER  C2D 50

14                              D42   AGS          2E1000    POWERED AGE SHOP

15           005 S 7125008721285  CLAMP         J3D 200
16           006 S 7300038434113  HOLDER FUSE   D3C 450
17           007 S 2270003103002  SPOOL WIRE    J3C 15

18 (omitted)

19                                      MILITARY EQUIPMENT BEING RETURNED
20                                      TO THE UNITED STATES FOR FUTURE
21                                      USE BY UNITED STATES ARMED FORCES
```

Figure 4

END

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5-86